

Biology (Subjective)**(GROUP-II)**

Time: 2:40 Hours

SECTION-I**2. Write short answers of any eight parts from the following:**

(8x2=16)

- i. What is the difference between fibrous proteins and globular proteins?
- ii. What are inhibitors? Write their two types.
- iii. Differentiate between apoenzyme & holoenzyme.
- iv. The low and high temperature respectively affect an enzyme activity. How?
- v. Enlist four types of asexual reproduction in fungi.
- vi. What is aspergillosis? Name the fungus which causes it.
- vii. Enlist four examples of sponges with their habitat.
- viii. Define polymorphism. What is the generic name of 'Portuguese man of war'?
- ix. Give names of any two sub-classes of mammalia.
- x. What is Notochord? State its function.
- xi. Differentiate between catabolism and anabolism.
- xii. Which form of anaerobic respiration occurs in muscle cells of human during sprinting? Also represent it by equation.

3. Write short answers of any eight parts from the following:

(8x2=16)

- i. How does Phyletic Lineage extend back to the common origin of all early life?
- ii. Write down attributes of population.
- iii. How cell cytoplasm play role in cell physiology?
- iv. What is chemical composition of bacterial (Prokaryote) cell wall?
- v. How would you differentiate fungus-like protists and fungi?
- vi. What are amoebas? Give their types
- vii. What functions are performed by micronuclei and macronuclei in ciliates?
- viii. Why Euglenoids are placed in Algae as well as in Protozoa?
- ix. How does temperature affect the oxygen carrying capacity of Haemoglobin?
- x. How does the skin of earthworm is kept moist for the exchange of respiratory gases?
- xi. Differentiate Antigen and Antibody.
- xii. What is the difference between single circuit and double circuit Heart?

4. Write short answers of any six parts from the following:

(6x2=12)

- i. What are the pocks? Give their cause.
- ii. Write the difference between archaeo bacteria & eubacteria?
- iii. Differentiate the Archegonia and Antheridia.
- iv. What is circinate vernation? Give an example.
- v. What do you know about annulus and stomium?
- vi. How can adipose tissue is formed?
- vii. Which plants are called supermatophytes?
- viii. What are hunger pangs? When do they begin?
- ix. Why humans develop intestinal gas from consuming milk products?

SECTION-II**Note Attempt any three questions. Each question carries equal marks:**

(8x3=24)

5. (a) What is an organ? Discuss organ and organ system level of organization. (2+2=4)
- (b) How CO_2 is transported from tissues to lungs? (4)
6. (a) What is RNA? Describe its three types. (b) Give economic losses due to fungi. (1+3=4) & (4)
7. (a) What are plastids? Give three types & explain chloroplast in detail and draw its labeled diagram. (1/2+1/2+2+1=4)
- (b) Explain role of pancreas and liver in digestion in human beings. (2+2=4)
8. (a) Write detailed note on AIDS. (4)
- (b) Discuss symptoms and reasons of Leucaemia and thalassaemia. (2+2=4)
9. (a) Discuss nutrition in bacteria. (4)
- (b) What is photophosphorylation? Discuss non-cyclic photophosphorylation in plants. (1+3=4)